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## Grade 12 Student Career Needs and Perceptions of the Effectiveness of Career Development Services Within High Schools

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### ABSTRACT

High school students engaging in career decision making encounter significant challenges due to changing social and economic conditions. The student needs assessment focus of this study provides unique insights into student perceptions of the effectiveness of high school career programs. Results indicated that Grade 12 students value resources that support transitions, have a passion for career, and report a wide range of occupational choices. However, students may not perceive career development resources available at the high school level as being very effective. Implications for the delivery of high school career programs and the development of public policy on career services are discussed.

### RÉSUMÉ

Les changements fréquents des conditions sociales et économiques imposent des défis considérables aux étudiants du niveau secondaire lorsqu'ils considèrent une décision se rapportant à leur carrière. Cette étude, grâce à l'analyse des besoins des élèves, donne un nouvel aperçu de la perception des étudiants de l'efficacité des programmes au secondaire sur les carrières. Les résultats indiquent que les étudiants de 12e année apprécient les ressources qui facilitent la transition de l'école au travail, expriment le besoin d'une carrière qui les passionne, et reconnaissent une vaste gamme de choix professionnels. Cependant, les étudiants peuvent ne pas percevoir les ressources disponibles au niveau secondaire sur le développement professionnel comme très efficaces. Les implications pour la prestation de programmes d'orientation de carrière ainsi que pour le développement de la politique publique sur les services de carrière y sont discutés.

The school-to-work transition (STW) requires that high school graduates make personal and career choices within the framework of changing social and economic conditions (Bezanson & Hiebert, 1997; Finnie, 2004; Human Resources Development Canada, 1998; Lowe, Krahn, & Bowlby, 1997). The career counselling literature documents a 21st century that is a post-industrial society (Alberta Advanced Education and Career Development, 1995; Blustein, 1997b; Lee & Johnston, 2001; Lent, 2001; Peavy, 1996; Savickas, 1993; Watts, 1996).

Post-industrial society is defined by transformations in labour markets, the nature of work, the emergence of knowledge-based industries (Finnie; Gilbert, 2007), the newly dominant forces of information technology, massive immigration, and global economies (Savickas; Watts, 1996). The changing STW parameters are clearly outlined by economists who study labour markets. Future workers must have specific skills training beyond high school to fully participate in the new realities of the knowledge-based economy (Alberta Human Resources and Employment & Alberta Learning, 1999; Gilbert; Lee & Johnston; Pelsma & Arnett, 2002; Sanchez, 2003; Watts, 1996). Furthermore, Cox and Espinoza (2005) have argued that in rural areas the need for resources to address such changes in the labour market are just as salient, if not more so, compared with more urban centres. This echoes the research of Borgen, Amundson, and McVicar (2002), who have noted that on top of the changes facing all workers in the post-industrial era, rural residents frequently have the added strain of relocation for work and the separation from primary support groups.

High schools are challenged to provide graduates with the knowledge and skills to pursue individual career goals within this rapidly changing and demanding context (Alberta Human Resources and Employment & Alberta Learning, 1999; Dickson, 1995; Human Resources Development Canada, 1998). The transition from secondary education to post-secondary education and the world of work is described as "a process through which a student travels; a concept or set of relationships which can be defined and delineated; a set of programs, resources and services" (Minister of Public Works and Government Services Canada, 1998, p. 7).

The requirements of secondary school graduation in Alberta include a curriculum emphasis on outcomes, expectations related to employability skills, and an emphasis on the benefits of work experience (Alberta Human Resources and Employment & Alberta Learning, 1999; Alberta Learning, 2000; Dickson, 1995; Minister of Public Works and Government Services Canada, 1998). For example, the Career Directions component of the Alberta Education Career and Technology Studies curriculum requires students to create portfolios that provide comprehensive pictures of students' strengths and competencies using such tools as resumes, application forms, correspondence with businesses, and examples of job interview questions with responses (Alberta Learning, 2002). Students not only learn about the process of finding work, but are also expected to present their portfolios in a way similar to how they would present it to a job interviewer. Also, the work experience program provides experiential learning activities for students in an off-campus setting where students can discover their career interests and aptitudes, while developing their career planning and employability skills (Alberta Learning, 1995). In addition, several authors (e.g., Dickson; Hiebert & Bezanson, 1995; Powlette & Young, 1996) describe how Canadian public policy initiatives have given prominence to high school career development practice and an agenda of improved career resources for youth. These trends appear to have persisted, although much work is still required toward implementing public policy initia-

tives and developing comprehensive, research-oriented best practice approaches (Organisation for Economic Co-operation and Development, 2004).

It is important to consider the implications of these public policy plans on high school career curriculum and education in the discussion of adolescent career needs. "A Comprehensive Career Development System (CCDS) asks school systems and schools to establish a developmental, coordinated, systematic approach to help every student make career plans and make a successful transition into the workplace or post-secondary programs" (Alberta Learning, 2000, p. 3). Bezanson and Hiebert (1997) stated that career services can provide students with the motivation to complete high school and the resources to make sound decisions regarding post-secondary education and training. In addition, Watts (1996) and Team Canada (2000) suggested that career education delivered in school systems and post-secondary institutions should provide students with knowledge of their skills, interests, talents, and motivations, as well as information on post-secondary and labour market options. A number of authors (e.g., Bezanson & Hiebert; Dickson, 1995; Team Canada) recommended that career education become a core component of the secondary curriculum. Team Canada observed that each Canadian province has an autonomous education system. Therefore, the delivery of secondary career education and counselling varies significantly across the country.

Canadian STW research has examined the career plans of Grade 12 students. Lowe et al. (1997) reported the STW transition of 1,000 Alberta high school seniors and examined the following factors: educational achievement, further educational plans, relevance of high school education, work and volunteer experience, acquisition of work-relevant skills, and career goals. As a result of this study, recommendations were to continue the study of the complex pathways between secondary and post-secondary education and between education and employment, specifically the key supports and barriers to students' educational and career goals.

The report by the Minister of Public Works and Government Services Canada (1998) affirmed that new research is required on the effectiveness of school career services, including student access to labour market information, individual career counselling, and computerized career information. Other researchers highlighted their findings that students reported a stronger need to know about life/career implications and life/career management tasks than to know about their personal interests, characteristics, and the nature of work (McMahon & Watson, 2005). Also, in a study of adolescent health-related needs, Collins (1998) observed that high school students regard the preparation for future education and career as important. Research based on a school leaver's survey, with a sample size of 18,000 individuals aged 18 to 20 years, analyzed the labour market participation patterns of youth and indicated that high school education may not be enough; recommendations were made that more attention be given to the career development experiences of youth (Human Resources Development Canada, 1998). Lastly, Blustein, Phillips, Jobin-Davis, Finkelberg, and Roarke (1997) recommended that research examine the context of youth STW transition and that it continue

to identify critical elements and ways in which adaptive characteristics may be fostered.

The need to evaluate the efficacy of career education programs has also been discussed by a number of authors (e.g., Bezanson & Riddle, 1995; Black, 1993; Bloch, 1996; Charner, Fraser, Hubbard, & Horne, 1995; Dedmond, 1996; Schultz, 1995). Bezanson and Riddle developed a Canadian manual entitled *Quality Career Counselling Services: A Policy Workbook*. This tool was designed to support the understanding and meeting of client expectations, with an emphasis on a vision of quality principles, practices and policies. Both Schultz and Dedmond wrote about the efficacy of career counselling centres and advocated for attention to written mission statements and annual reports. They viewed accountability as achieved by client feedback on the services provided. These authors encouraged asking clients what they expect and how they can be served. Dedmond examined school career services and viewed their ultimate goal as students gaining career-planning competencies. Of noted importance was the role of the career program coordinator in developing a documentation and reporting system, with an emphasis on program evaluation to ensure "the process of continuous program improvement" (Dedmond, p. 91).

Black (1993) reported on the indicators of effective or strong school-to-work programs including trained school counsellors, a career resource centre, use of vocational interest and aptitude tests, job placement services, and ongoing monitoring of student success. Schools with STW transition programs discovered that their students were more likely to stay in school instead of dropping out. "For some at-risk kids, the chance to work closely with a caring adult and get more career counselling in schools seems to make the difference" (Black, p. 27).

Previous research has not directly asked high school students about the effectiveness or efficacy of specific high school career development services and resources. As a response to the call for career program evaluation, the purpose of the current study was to examine the delivery of career development services to Grade 12 students in southern Alberta, Canada. The Comprehensive Career Needs Survey (CCNS; Magnusson & Bernes, 2002) functioned as a needs assessment instrument and obtained feedback from students, teachers, parents, school administrators, and school counsellors on their utilization and perceptions of the effectiveness of high school career curriculum, resources, and services (Bardick, Bernes, Magnusson, & Witko, 2004; Witko, Bernes, Magnusson, & Bardick, 2005). Data were gathered on the helpfulness of high school career services and students' perceptions of support and barriers to career plans. The CCNS asked questions regarding how school programs and services helped in career planning, what students' levels of confidence were in finding an occupation they love, and if students believed they would get the training or education they need. This study was designed to gather information on what Grade 12 students need for career planning and how they may be helped with their career planning.

Underlying this study is the model of career transition as outlined by Super, Savickas, and Super (1996), which discusses the idea that careers are much more

than what one does for work; careers are a combination of our experiences across our roles as workers, learners, citizens, family members, and leisurites. Therefore, transitions made in any one of these areas affect a person's career, and furthermore, values and attitudes toward each area need to be assessed in providing career guidance. This study is also informed by the model of career maturity (Blustein, 1997a) that suggests that career exploration includes many psychological aspects that examine "how self-knowledge is obtained, how motivation to engage in self-enhancing activities occurs, how information is processed, and how the context influences nearly every aspect of psychological and social functioning" (p. 261). In particular, Blustein (1997a) encouraged attention to the variety of life-roles in the development of a career. With these concepts in mind, we now turn to a description of the current study.

#### METHOD

This study is based on data from a much larger study using the CCNS (Magnusson & Bernes, 2002). The CCNS research is a collaborative project between the professionals who work with adolescents and the researchers that study the career planning needs of these adolescents. The CCNS was a shared project between the Southern Alberta Center of Excellence for Career Development; the University of Lethbridge, Faculty of Education; the Chinook Regional Career Transitions for Youth project; and The Southwestern Rural Youth Career Development project. This large-scale survey focused on the perceptions of junior and senior high school students, parents, teachers, school counsellors, and administrators in regards to adolescents' career development needs and wants, perceptions of the efficacy of career planning services and resources, and perceived gaps in services and resources.

A review of the literature revealed that there were no standardized assessments available for this project. Consequently, the CCNS (Magnusson & Bernes, 2002) was developed to assess the career needs of junior high and senior high school students in southern Alberta. The survey forms were field tested with career counselling professionals and students in Grades 7 through 12 to ensure the questions were clear and unambiguous. Consequently, a mixed methods approach was used. It was hoped that, by collecting data qualitatively and quantitatively at the same time, a clearer picture of the results would be created (Anderson, 1998). The survey asked for sociodemographic information and consisted of questions evaluating students' career education and support needs. Topics included perceived resources and needs, educational needs, future goals, and aspirations. The survey consisted of distinct forms developed for each of the following groups: junior high students (Grades 7 to 9); senior high students (Grades 10 to 12); parents; teachers and school administrators; and school counsellors, health teachers, and career and life management (CALM) teachers. The junior high and senior high forms had 19 questions with topics regarding perceived resources and needs, educational needs, future goals and aspirations, and their perceptions of the effectiveness of career planning providers

and career planning resources. The parent and teacher/administrator forms had 11 questions regarding their perceived role in adolescent career planning and potential gaps in services. The counsellor/teacher forms had 15 questions regarding their perceived role in adolescent career planning, potential gaps in services, and their perceptions of the involvement and effectiveness of career planning providers. The questions required both quantitative and qualitative responses. The form used in the current study focused on the responses from Grade 12 students.

### *Participants*

The present study focuses on the collected data for the 888 Grade 12 students who completed the survey (see Table 1). It should be noted that each of these students is required to pass the CALM course as outlined by Alberta Learning (2002) in order to meet graduation requirements. This course is generally completed when students are in Grade 11. The CALM curriculum is aimed at helping students develop skills around making decisions and choices across all areas of their lives that contribute to their overall well-being. The CALM curriculum is divided into three general outcomes. The first, Personal Choices, helps students learn self-management based on an understanding of the emotional, psychological, physical, spiritual, intellectual, and social aspects of their lives. The second, Resource Choices, helps students identify their personal resources, such as finances, and how to use those resources to assist themselves and others. Finally, the third general outcome, Career and Life Choices, helps students utilize personal and career development techniques such as strategies to deal with transitions, the development of personal career portfolios, and the designing of plans to reach life goals.

**Table 1**  
*Profile of Grade 12 Student Participants*

Age	n	(%)	School Size	n	(%)	Town Size	n	(%)
16	7	(0.8)	<100	4	(0.5)	<1,000	53	(6.0)
17	642	(72.4)	100 to 500	696	(78.4)	1,000 to 10,000	632	(71.5)
18	215	(24.2)	500 to 1,000	130	(14.6)	>10,000	199	(22.5)
19	24	(2.7)	>1,000	58	(6.5)			
Total	888	(100.0)		888	(100.0)		884*	(100.0)

\* Some surveys were not complete.

### *Procedure*

Students responded to the survey during school hours. Classroom teachers were given an explanation regarding the survey's purpose and importance (i.e., to examine students' perceptions of the importance of career planning, and obtain

their perceptions of the helpfulness and effectiveness of career resources), and administered the survey to student volunteers. Students took approximately 20 minutes to complete the survey. Students were not provided additional information regarding the survey, as a number of questions not reported in this section of the study focused on students' perceptions of career and occupation (see Pyne, Bernes, Magnusson, & Poulsen, 2002).

#### *Questionnaire*

The CCNS High School Form was a 19-item self-report measure. The questionnaire design allowed for the examination of multiple factors linked to career needs. The section about Career Plans focused on students' specific career plans, post-secondary education plans, reasons for occupational choice, factors of encouragement and discouragement in career plans, the importance of career planning, and the people approached for help in career planning. The section about Career Help focused on student utilization of and perceptions of the effectiveness of high school career development services and curriculum resources. The specific survey items from the senior high questionnaire used in this section of the research are provided in the Appendix.

#### *Data Analysis*

Both quantitative and qualitative data analysis were used in this study. Career plans and career help were assessed from a quantitative perspective through the use of single response questions, categorical response questions, and Likert-type rating scales (ranging from 0 = not at all important to 4 = very important). The responses to these questions are reported through the use of descriptive statistics (frequency counts and percentages). The rank ordered mean scores and the standard deviations are reported for the Likert-type items.

Many of the questions required open-ended responses, thereby adding a qualitative component to this study. This study used 225 of the 888 surveys in the qualitative analysis. Twenty-five randomly selected items were obtained from each Grade 12 class participating in the study; thus the surveys selected were representative of all the school populations and the school communities that participated in the study. One researcher performed the initial coding of the data. A coding taxonomy was derived from the content analyses of the open-ended questions in order to describe the students' responses to these open-ended questions, as well as to analyze the responses. If a new theme emerged, it was compared to the previous samples and reviewed as to its relevancy to other themes. When it appeared no new themes were emerging, the researchers reviewed all of the data compiled and sorted each statement into the relevant themes that had been discovered. The themes were then coded and the frequency and percentage of each coded theme were calculated. Themes were then validated by three graduate students who were not part of the research team. The graduate students received training on qualitative analysis as part of their graduate course work.

## RESULTS

The results of this study are presented in two sections: career plans and career help. Part one, career plans, reports on the stage of decision-making for Grade 12 students in regard to their career plans, post-secondary plans, choice of occupation given proper education or training, reasons for occupational choice, factors of encouragement and discouragement, the importance of career planning, and the people approached for help in career planning. Part two, career help, provides data on student utilization and perceptions of the effectiveness of high school career development services and curriculum resources.

*Career Plans*

Most of the Grade 12 students surveyed reported a specific plan and had reached a stage of commitment and decision-making (39.6%) or indicated that they were deciding between two plans (42.3%). Only 12.5% of students reported being unsure of their destination after high school but have started to plan. However, 5.5% responded by saying that they "don't know" or "do not have" a career plan.

When asked what they would most likely be doing in the year after they left high school, students were instructed to indicate as many options as apply to them. As can be seen in Table 2, the top three student plans were to attend full-time studies at a university, college, or technical institute; work part-time; and work full-time.

**Table 2**  
*Grade 12 Students' Post High School Plans*

Response	n	(%)
Full-time studies at university, college, or technical institute	398	(29.2)
Part-time work	235	(17.2)
Full-time work	217	(15.9)
Travel	143	(10.4)
Part-time studies at university, college, or technical institute	126	(9.2)
Other (not specified)	92	(6.7)
Other training	68	(5.0)
Volunteer	46	(3.4)
Return to high school	39	(2.9)
Total responses	1,364	(99.9)

*Note.* Students were able to choose more than one answer.

*Occupational aspirations.* When asked "If you had to start work tomorrow assuming you had the proper education or training, what work would you choose?" the student answers were organized according to the major occupational categories of the National Occupational Classification Index of Titles (NOC codes; Employ-

ment and Immigration Canada, 1993). Results indicated that 79.5 % of the students planned to pursue a career that requires post-secondary education or training. An overview of students' occupational aspirations is provided in Table 3.

**Table 3**  
*Occupational Aspirations*

Occupation	n	(%)
Professional education/social services	51	(17.1)
Health	45	(15.1)
Technology/science/health	44	(14.7)
Trades/skilled blue collar	28	(9.4)
Natural/applied science	20	(6.7)
Management	19	(6.4)
Paraprofessional/social sciences/arts/culture	18	(6.0)
Business/finance	17	(5.7)
Culture	15	(5.0)
Skilled sales/service	13	(4.3)
Unskilled/blue collar	6	(2.0)
Don't know/incorrect response	23	(7.6)
Total responses	299	(100.0)

*Note.* Some students chose more than one answer.

*Rationales for occupational aspirations.* For the results of an open-ended question on why students would choose a certain kind of work, the themes were coded and the percentage of each coded theme was calculated. Seven main themes emerged from these data. The first theme revolved around interests ( $n = 63$ , 24.9%). Examples of interest-based factors included "It interests me," "Involves things I like to do," and the identification of likes or interests including math, the outdoors, teaching, sports, writing, working with my hands, design, and electronics. Another major theme was working style ( $n = 55$ , 21.7%). Examples of specific responses in this theme were "I like working with children/teens," "I enjoy working/communicating with people," and other more specific responses that included "challenging," "independence," "exciting," and "solving problems." Also of importance to the students were knowledge of job requirements or labour markets ( $n = 51$ , 20.1%), skills and talents ( $n = 32$ , 12.6%), and the connection between career and personal passions ( $n = 28$ , 11.0%). This group of students described career as more than earning an income and viewed career as the expression of interests, talents, and passions. A very small number of students expressed interest in making a contribution to society ( $n = 6$ , 2.3%), with statements such as "help people suffering" and "advance the human race."

*Factors of encouragement and discouragement.* Students were also asked about factors of encouragement in careers. As can be seen in Table 4, the top two themes associated with factors of encouragement were adequate income and success/work

satisfaction. The top two themes associated with factors of discouragement were the nature of working conditions and the perceived difficulty of post-secondary training.

**Table 4**  
*Factors of Encouragement and Discouragement*

Factor	n	(%)
Factors of encouragement		
Income	75	(27.1)
Success and work satisfaction	58	(21.0)
Enjoyment	30	(10.8)
Life role	25	(9.0)
Personal strengths	19	(6.8)
Helping	18	(6.5)
Learning	15	(5.4)
Working with children	9	(3.2)
Support parent and others	2	(0.7)
No/inappropriate response	25	(9.0)
Total	276	(100.0)
Factors of discouragement		
Nature of working conditions	61	(23.9)
Perceived difficulty of post-secondary education	60	(23.5)
Personal factors	54	(21.1)
Income	16	(6.2)
Work schedule	14	(5.4)
Other	14	(5.4)
Job security	12	(4.7)
No/inappropriate response	24	(9.4)
Total responses	255	(100.0)

*Importance of remaining in one's community.* The students were asked (a) how important it was to be able to find work that allowed them to stay in their home community; and (b) how likely they believed it would be to find work in their community, province, country, and internationally. Results suggested that working in one's home community was not a priority for most of the students, with the top two categories being "not at all important" ( $n = 385$ , 43%) and "slightly important" ( $n = 249$ , 28.2%). As can be seen in Table 5, students reported that they believed they were more likely to find work in their country, their province, or internationally than in their home community.

*Importance of career planning.* In a question on the importance of career planning, the students regarded career planning as "quite important" ( $n = 352$ , 39.9%) or "very important" ( $n = 307$ , 34.8%). Thus 74.7% of students viewed career plan-

ning as being important in the Grade 12 year. As can be seen in Table 6, students' top three perceived needs for career planning were post-secondary information, career information, and work experience.

**Table 5**  
*Location of Work*

Location	Not at all likely	Not very likely	Somewhat likely	Quite likely	Very likely
	n (%)	n (%)	n (%)	n (%)	n (%)
Community	197 (24.1)	169 (20.7)	236 (28.9)	110 (13.4)	106 (13.0)
Province	63 (7.7)	62 (7.6)	198 (24.3)	237 (29.1)	255 (31.3)
Country	22 (2.7)	15 (1.8)	138 (16.9)	194 (23.8)	446 (54.7)
Internationally	137 (16.9)	153 (18.9)	141 (17.4)	121 (15.0)	257 (31.8)

**Table 6**  
*Perceived Career Planning Needs*

Perceived need	n	(%)
Post-secondary information	70	(27.6)
Career information	50	(19.7)
Work experience	28	(11.0)
Labour market information	23	(9.0)
How to be successful in high school	15	(5.9)
Individual career counselling	14	(5.5)
Support in obtaining career plans	4	(1.5)
No/inappropriate response	53	(19.5)
Total responses	253	(100.0)

*Note.* Some students provided more than one response.

*Who students approach for help.* Students were asked who they would feel most comfortable approaching for help with career planning. Students ranked parents first ( $n = 364$ , 43.9%), school counsellors second ( $n = 131$ , 15.8%), and someone working in the field third ( $n = 112$ , 13.5%).

#### *Career Help*

Part two of the CCNS questionnaire focused on high school career development services, high school career education and resources, and confidence in future education and career. Students rated the helpfulness of career planning services, resources, and their confidence in obtaining their desired career.

*Helpfulness of career planning services.* Students were asked to rate the potential helpfulness of 12 possible high school career planning services. As can be seen in Table 7, the two items perceived to be most helpful to Grade 12 students pertained to self-understanding or "pursuing things I am passionate about" ( $M = 3.40$ ) and

“understanding my interests and abilities” ( $M = 3.28$ ). In summary, many facets of career planning services received strong affirmation by these Grade 12 students.

**Table 7**  
*Perceived Helpfulness of Career Planning Services*

Priority	Response	Mean	S.D.
1	Finding ways to pursue things I am passionate about	3.40	.83
2	Understanding my interests and abilities	3.28	.89
3	Information about financial help for continuing my education	3.17	.98
4	Information about post-secondary institutions	3.14	1.0
5	Getting support for my career plan	3.04	.93
6	Help with planning the next steps in my career	2.98	.98
7	Information about different kinds of occupations	2.96	.96
8	Information about the world of work	2.95	.93
9	Help with choosing between two or more occupational options	2.58	1.1
10	Information about opportunities within my community	2.37	1.12
11	Convincing me it is important	2.22	1.28
12	Other	1.67	1.65

*Helpfulness of career planning resources.* The students were asked in another Likert-type question to rate how helpful specific high school and community career education programs and resources have been to their career planning. As can be seen in Table 8, the mean scores for all items are low or in the category of only “Somewhat Helpful” to career planning. The students gave the highest ranking to the CALM course ( $M = 1.91$ ), followed by career counselling ( $M = 1.86$ ), written materials ( $M = 1.76$ ), and work experience ( $M = 1.75$ ). These results suggested that although Grade 12 students rated the CALM course higher than other career planning resources, they generally do not find current career planning resources to be very helpful.

*Confidence.* In a final research question on student confidence about the next few years of their life, the results suggested that these students are confident that they will find the occupation they love to do (“quite likely” [ $n = 238$ , 40.7%]; “very likely” [ $n = 224$ , 27.8%]), obtain the education and training they need (“quite likely” [ $n = 351$ , 40.8%], “very likely” [ $n = 334$ , 38.8%]), and work in the occupation they have chosen (“quite likely” [ $n = 372$ , 43.3%], “very likely” [ $n = 265$ , 30.8%]). This appeared to be a motivated group of Grade 12 students who have a positive sense of career.

#### DISCUSSION

The CCNS examined student career planning needs and obtained their perceptions of the effectiveness of career planning resources, with the goal of understanding student needs and priorities for the delivery of career education

programs to Grade 12 students. The need for approaching career planning with a developmental needs framework is confirmed by the results of this CCNS research, as the majority of the students confirmed the need for resources and support from people in developing their career plans. This study also corroborates research results reporting that students give high ratings to the need for career and life planning educational programs (Collins, 1998; Gordon, Couture, & Drefs, 2000). The majority of the Grade 12 students in this study stated that they would find many high school career development services to be helpful at this time in their life. Specifically the priorities they identified are finding ways to pursue things that they are passionate about, understanding interests and abilities, obtaining information on financial help for continuing their education, and obtaining information about post-secondary education. Career development public policy recommends that career development activities take place in the high school setting (Team Canada, 2000). The results of this study affirm that career development activities in the high school are appropriate and necessary to aid students with their career planning. Furthermore, some of the reported benefits for focusing on career development strategies include increased motivation for students to continue learning after high school, an increase in retention rates and academic success at high schools, and even a reduction in poverty and unemployment rates (Bell & Bezanson, 2006).

**Table 8**  
*Perceived Helpfulness of Career Planning Resources*

Priority	Response	Mean	S.D.
1	CALM course	1.91	1.16
2	Career counselling	1.86	1.47
3	Written materials	1.76	1.34
4	Work experience	1.75	1.60
5	Internet sites	1.74	1.47
6	CTS course	1.66	1.35
7	Computer programs	1.49	1.36
8	School career information centre	1.32	1.40
9	Career fairs	1.31	1.40
10	Interest inventories	.98	1.29
11	Career planning workshops	.98	1.29
12	Job shadowing	.88	1.34
13	Videos	.85	1.22
14	Career library outside school	.79	1.23
15	Local/regional library	.76	1.15
16	Other	.73	1.33
17	CD-ROMs	.72	1.18
18	Community agencies	.70	1.14

These data provide insight in terms of Super et al.'s (1996) model of career transitions, and Blustein's (1997a) model of career maturity. In terms of career transitions, the students in this survey expressed a need to engage in careers based on an understanding of their interests and abilities as well as their passions. This suggests an attitude toward careers similar to Super et al.'s model in that a career is much more than merely a job one engages in. In terms of career maturity, the students in this survey demonstrated an awareness of the relationship of career to various life roles (Blustein, 1997a) in their rationales for occupational aspirations. The six most common themes that emerged as reasons to engage in certain careers are personal interests, personal working styles, communicating with people, knowledge of job requirements, making connections between career and personal passions, beliefs that a career is more than earning an income, and the stance that a career is the expression of interests, talents and passions. Blustein's model (1997a) appears to integrate each of these areas into career development.

Results of this study indicated that the majority of the Grade 12 students surveyed planned to obtain post-secondary training on either a full-time or part-time basis. These results are similar to the Lowe et al. (1997) study, where 63.3% of high school students intended to obtain post-secondary training. The CCNS research findings indicate that the majority of these Grade 12 students are seeking the level of education they believe is needed to obtain the occupation of their choice. These results validate educational efforts informing students of the importance of acquiring the knowledge, values, and skills for obtaining a meaningful occupation in the 21st century (Alberta Human Resources and Employment & Alberta Learning, 1999; Hackett & Baran, 1995; Human Resources Development Canada, 1998). However, it should also be noted that the students' responses in this survey suggest that occupational aspirations seem to cluster into a limited number of themes, thereby creating the possibility of a large number of workers for a limited number of jobs. Perhaps such a trend is more indicative of a lack of awareness of the diversity of work choices that actually exist and of the many paths that can lead to such choices. While the message that education is important seems to be effectively learned by today's youth, perhaps education regarding alternative jobs and alternative methods of education are also necessary.

Results of this study are affirming of the provincial public policy on human capital development and post-secondary credentials (Alberta Human Resources and Employment & Alberta Learning, 1999; Alberta Human Resources and Employment, 2005), with 60.4% of students reporting having a goal of working within the province. A further observation was that these Grade 12 students have a national and global perspective on the career and labour market, indicated by their perceptions that they could potentially find work nationally or internationally.

The diverse range of occupational choices indicated by the students and the hopefulness of these students in attaining their career aspirations indicate that the opportunity for career attainment is viewed as accessible by most of these students. The results suggest that the students expect to attain career success and work in enriching work environments. These results profile a group who desires to be in

control of career and is very much concerned about career satisfaction. Students' rationales for their occupational choices suggest an evolving self-knowledge and attention to interests, working style, job requirements and labour markets, awareness of skills and talents, and connection of career to personal passions. Students indicated that they value self-direction, and results align with the findings of Peavy (1996) and Watts (2000) that students are active in self and career identity tasks.

These Grade 12 students appear to value resources that support transition to post-secondary education or work. When students ranked the individuals they were most comfortable to approach for help in career planning, students rated parents first, school counsellors second, and someone working in the field third. These results affirm the importance of parental involvement in students' career planning. Parents who responded to the CCNS perceived their roles during career planning as being supportive, informative, and educative, and believed that increased information and stronger relationships with teachers would help them to support their child's career planning (Bardick et al., 2004). Consequently, parents should be kept up to date on high school career development resources and be offered training on how to take an active and informed role in their children's career education.

The CCNS research results provide significantly different findings for professional staff in schools than previous research has shown. In this study, 13.5% of the students indicated that they would approach school counsellors for help. Although this is higher than Powlette and Young's (1996) findings that only 5% of students relied on teachers or counsellors as "significant others" for influence in career plans or selection, it is still only a small percentage of students who believe school counsellors are helpful in career planning. School counsellor responses to the CCNS indicated a number of barriers to assisting students with career planning, including lack of time, support, resources, and training (Witko et al., 2005). Considering that students would like support from school counsellors and teachers during their career planning, these results indicate a need for improved career training for school professionals in addition to improved access to effective career planning resources.

The results of this study indicate that career counselling services and resources are available to students in high school, thereby suggesting the curriculum mandates have been implemented (Alberta Learning, 2000). These results affirm the requirement for career education programs in high schools, since few of the students (17.5%) reported accessing these services within the community setting. The results are somewhat inconclusive about the availability and use of a career information centre, as over half of the students (56.5%) confirmed it was available but only 43.6% of the students reported using the centre. Students reported high availability (71.7%) of Internet sites, but more limited use (57.6%). Considering the extensive career-related information that can be found on career development Internet sites (Kirk, 2000; Kleiman & Gati, 2004), these sites must be marketed more effectively to educators and students. While CALM teachers may utilize such resources, perhaps the explicit inclusion of Internet resources into the CALM

curriculum (Alberta Learning, 2002) would guide more CALM teachers toward including deliberate instruction around their use. This would likely lead to an increase in the number of students accessing online career development resources.

When asked to rate 18 high school career education resources, the students indicated that all were available, but the efficacy data suggests they are underutilized and the students reported that many of the career education programs were not helpful to career plans. These results suggest that ongoing modification of existing services and reevaluation of programs is a critical practice (Bell & Bezanson, 2006; Bezanson & Riddle, 1995; Black, 1993; Bloch, 1996; Charner et al., 1995; Dedmond, 1996; Hansen, 2003; Schultz, 1995). The results of the CCNS provided succinct client feedback. Further evaluation studies are needed to prompt modifications and improvements to available career programs in order to increase their effectiveness and use by students, who report wanting assistance with their career development. Results specifically indicate a need for specialized post-secondary counselling. Post-secondary programs must provide information on admissions, programs, and specialized transition counselling for their prospective students (Arthur & Hiebert, 1996).

Lowe et al. (1997) recommended further research to identify key supports and barriers to high school students' educational and career goals. The current study addressed this research priority, obtaining data on what was most encouraging for Grade 12 students' career plans. The top factors of encouragement included making money to support wants and needs, importance of work success and satisfaction, and enjoyment of work. Students reported finding the following factors discouraging in their career planning: concerns about the nature of working conditions, challenging requirements of post-secondary education, and personal factors of success in career. These results indicate that although students have high ideals for their future careers, they may not be confident that the reality of the working world will match their ideals. This indicates that further exposure to actual working environments (e.g., work experience and apprenticeship), along with career counselling that helps students explore their ideals, may be beneficial to these students.

#### LIMITATIONS OF THE STUDY

The research was conducted in the province of Alberta, in centres with populations of 500 to 75,000 people. Although these results are valid, based on the large number of subjects, these results may not generalize to Grade 12 students beyond rural southern Alberta. The time of year for the administration of the study, which in this instance was May, may have influenced the results. This is due to the fact that, by May, Grade 12 students might be clearer about their career plans than they would have been the previous September. This study did not address gender differences, cultural differences, or socioeconomic status, which may have provided further insight into student responses. The CCNS is a broad survey instrument that is based on student self-reports, and therefore the results reflect the students'

perceptions of reality at that moment in time. The method by which the data were collected in this survey did not allow for elaboration, personalization, or reflection on individual questions. Questions on the use and helpfulness of career portfolios were not presented in the CCNS questionnaire, despite the reported success of this learning tool within some school jurisdictions. Therefore, students in some school jurisdictions may report different results with career resources that were not examined in this study.

#### RECOMMENDATIONS FOR FUTURE RESEARCH

Further research on the delivery and efficacy of recent career education initiatives in high schools is strongly indicated by the results of this study. This CCNS instrument could be utilized in major urban centres and the results contrasted to the more rural population of this sample. The results of Grade 12 career program needs may also be compared to the results of the larger CCNS study, which provided information on the career education perceptions of the administrators, teachers, and parents. The transition anxieties exhibited by Grade 12 students regarding programs and course selection in post-secondary programs must receive additional research attention. It is imperative to understand and maximize the student strategies and repertoires for success in learning beyond high school. Research attention to the labour market participation rates of post-secondary graduates and their career success following graduation is also recommended. Previous research has proposed the importance of support for students. It therefore seems important to investigate the impact of relational support on decisions related to academic success and career. As well, future research may focus on profiling the many specific values and goals of high school students regarding career choice upon post-secondary graduation. The expressed priorities and the value systems of future workforce participants may be of value to human resource practitioners.

Further attention must be given to the 10% of the students in this study who were non-responsive to questions about career plans. In addition, the efforts of career development policy must be directed to students who do not complete high school. The focus of the needs assessment methodology could be directed to this group who is “at risk” in the transition to labour markets. Human Resources Development Canada (1998, 2000) reported on the 32% of youth aged 22 to 24 who either did not complete high school or did not pursue further education or training. Many of them went to work. This study suggested a continuing STW transition research priority. A report entitled *Removing Barriers to High School Completion* stated that 27% of students—or 9,000 students—annually leave high school before earning a diploma (Derworiz, 2002). The goals of the Alberta Youth Employment Strategy (AYES) must continue to be addressed by all stakeholders in their efforts to improve high school completion rates and successful STW transition for all students.

Finally, given the expressed importance of work experience or “workplace learning” by these subjects, it seems important to conduct research on the students who

have participated in these programs. Exemplary STW practices may examine “pre and post” work experience impressions, mentorship, achievement, and perceived personal career gains.

#### CONCLUSION

The results of this needs assessment have been comprehensive and have yielded new insight into the career needs of a large group of Grade 12 students in Southern Alberta. High school career education programs may engender an orientation to transition tasks beyond high school. The majority of the students in this study appeared to exhibit a proactive stance toward personal career planning and were engaging in objective planning for participation in post-secondary institutions. The delivery and utilization of high school career education services need to be further examined, and, based on student feedback, adjustments to programs are necessary to meet students’ career planning needs.

A majority of the students in this Alberta study expressed the need to find enjoyment in their chosen occupation and to excel in their chosen career. The research affirms the importance of the collaboration between all stakeholders in the STW transition. Importantly, examining the perceptions of students who are the consumers of career development services represents pragmatism in the delivery of exemplary programs. Results of this study confirmed the importance of students being active participants in influencing the development of career services.

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## APPENDIX

### *Questions from the CCNS used for this study*

1. “Which of the following best describes your plans for what you will be doing after you have completed high school?” Students were asked to choose one of the following: “I have a specific plan for what I will be doing”; “I am

- trying to decide between a couple of different plans”; “I am not sure what I will be doing, but I have started working on it”; “I don’t know what I will be doing, and I am not worrying about it now.”
2. “Which of the following describes what you think you will most likely be doing in the year after you leave high school?” Students were asked to check as many options as applied to them from the following list: “Taking full-time studies at a university, college, or technical institute”; “taking part-time studies at a university, college, or technical institute”; “taking other types of training”; “returning to high school”; “working full-time”; “working part-time”; “working as a volunteer”; “travelling”; “other (please describe).”
  3. “If you had to start work tomorrow, and assuming that you had the proper education or training, what kind of work would you most likely choose?” (open-ended)
  4. “Why would you choose that kind of work?” (open-ended)
  5. “What are most encouraged about when you think of your career?” (open-ended)
  6. “What are you most discouraged about when you think of your career?” (open-ended)
  7. “How important is it to you to be able to find work that allows you to stay in your community?” Students were asked to rate their answer on a five-point scale ranging from 0 (*not at all important*) to 4 (*very important*).
  8. “If you find work in your chosen occupation, it will be:” Students were asked to rate four options (“in my community,” “in my province,” “in my country,” “internationally”) on a five-point scale ranging from 0 (*not at all likely*) to 4 (*very likely*).
  9. “How important is career planning to you at this time in your life?” Students were asked to rate their answer on a four-point scale ranging from 0 (*not at all important*) to 3 (*very important*).
  10. “Please rank the people you would feel most comfortable approaching for help with career planning.” Students were asked to rank their top three choices from the following list: “classroom teachers,” “CALM [Career and Life Management] teacher,” “school counsellor,” “parent(s),” “other relatives,” “friends,” “someone working in the field,” “other people I know and trust (please specify),” “no one.”
  11. “There are a number of things that people find useful for career planning. What would you find helpful at this time in your life?” Students were asked to rank the following items on a five-point Likert-type scale ranging from 0 (*don’t know*) to 4 (*very helpful*): “convincing me that career planning is important right now in my life,” “understanding my interests and abilities,” “finding ways to pursue the things I am really passionate about,” “information about the world of work,” “information about different kinds of occupations,” “information about opportunities within my community,” “help with choosing between two or more occupational options,” “information about post-secondary institutions,” “help with planning the next steps in my

- career,” “getting support for my career plan,” “information about financial help for continuing my education,” “other (please specify).”
12. “Please rate how helpful the following services or resources have been with your career planning.” This question had three parts. First, students were asked to rate how available each service or resources was on a three-point scale from 0 (*don't know*) to 2 (*yes, available*). Second, students were asked to indicate whether or not they made use of the service or resource by answering Yes or No. Third, students were asked to rate how helpful it was to them on a five-point scale ranging from 0 (*don't know*) to 4 (*very*). Options included “career counselling,” “school career information centre/career library,” “career library outside your school,” “local/regional library,” “community agencies,” “health class,” “Career and Technologies course,” “written materials,” “Take Our Kids to Work program,” “computer programs,” “interest inventories,” “career planning workshops,” “career fairs,” “Internet sites,” “videos,” “CD-Roms,” and “other (please specify).”
13. “When you think about the next few years of your life, how confident are you about the following?” Students were asked to rate the following items on a five-point scale ranging from 0 (*not at all likely*) to 4 (*very likely*): “I will be able to find an occupation that I love to do,” “I will be able to get the training or education I need,” and “I will be able to find work in the occupation I have chosen.”

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